PATENT COOPERATION TREATY

From the:
INTERNATIONAL SEARCHING AUTHORITY

To:

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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

	Date of mailing *(day/month/year)* 15 OCT 2004
Applicant's or agent's file reference 21609PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/AU2004/001053	9 August 2004	8 August 2003

International Patent Classification (IPC) or both national classification and IPC
Int. Cl. [7] H04L 1/16, 12/56; H03M 5/12

Applicant
CLIPSAL INTEGRATED SYSTEMS PTY LTD et al

1. This opinion contains indications relating to the following items:

[X]	Box No. I	Basis of the opinion
[ ]	Box No. II	Priority
[ ]	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
[X]	Box No. IV	Lack of unity of invention
[X]	Box No. V	Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
[X]	Box No. VI	Certain documents cited
[ ]	Box No. VII	Certain defects in the international application
[ ]	Box No. VIII	Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the IPEA/AU	Authorized Officer
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	**BEN TUOHY** Telephone No. (02) 6283 7918

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Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

   ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

   a. type of material

      ☐ a sequence listing
      ☐ table(s) related to the sequence listing

   b. format of material

      ☐ in written format
      ☐ in computer readable form

   c. time of filing/furnishing

      ☐ contained in the international application as filed.
      ☐ filed together with the international application in computer readable form.
      ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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Box No. IV Lack of unity of invention

1. [X] In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has:

   [X] paid additional fees

   [ ] paid additional fees under protest

   [ ] not paid additional fees

2. [ ] This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

   [ ] complied with

   [X] not complied with for the following reasons:

The international application does not comply with the requirements of unity of invention because it does not relate to one invention or to a group of inventions so linked as to form a single general inventive concept. In coming to this conclusion the International Searching Authority has found that there are two inventions:

1. Claims 1 - 26 are directed to a communications protocol for use in a network of devices, the protocol having a frame including a first time slot for transmitting data, a second time slot, after the first time slot, for transmitting a first acknowledge state, and a third time slot, after the second time slot, for transmitting a second acknowledge state. It is considered that the protocol having a frame including a first time slot for transmitting data, a second time slot, after the first time slot, for transmitting a first acknowledge state, and a third time slot, after the second time slot, for transmitting a second acknowledge state comprises a first "special technical feature".
2. Claims 27 - 30 are directed to a method of providing a marker in a data frame, the method including encoding data bits at a particular point in a data sequence to provide states, generating a state combination that is an illegal combination and recognising that illegal combination as a marker. It is considered that encoding data bits at a particular point in a data sequence to provide states, generating a state combination that is an illegal combination and recognising that illegal combination as a marker comprises a second "special technical feature".

Since the above mentioned groups of claims do not share either of the technical features identified, a "technical relationship" between the inventions, as defined in PCT rule 13.2 does not exist. Accordingly the international application does not relate to one invention or to a single inventive concept.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

   [X] all parts

   [ ] the parts relating to claims Nos.

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Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	3, 7 – 10, 27 - 30	YES
	Claims	1, 2, 4, 5, 6, 11 – 26	NO
Inventive step (IS)	Claims	3, 7 – 10, 27 - 30	YES
	Claims	1, 2, 4, 5, 6, 11 – 26	NO
Industrial applicability (IA)	Claims	1 – 30	YES
	Claims	None	NO

2. Citations and explanations:

Documents cited for the purpose of compiling this report:

(D1) US 6574668 B1 (GUBBI et al.) 3 June 2003, see whole document in particular abstract, fig 3 and columns 7 – 10; and

(D2) WO 2001/078426 A1 (PROXIM, INC. et al.) 18 October 2001, see whole document in particular fig 1B and pages 3 and 4.

NOVELTY (N) claims 1, 2, 4, 5, 6, 11 – 26

1. Claims 1 , 5, 11, 12, 17 and 21 are not novel in light of prior art documents D1 and D2 that each independently disclose all of the features defined in the claims. Each cited document independently discloses the transmission of data in a first time slot followed by at least one acknowledgement state in the following time slots. The possible acknowledgment states disclosed include MAC and/or TCP acknowledgments as disclosed in D2 and negative and/or positive acknowledgment states as disclosed in D1 (first and second acknowledgment states).

2. Claims 2, 4, 6, 13 – 16, 18 – 20 and 22 – 26 are not novel in light of prior art document D1 which discloses all of the features defined in the claims.

INVENTIVE STEP (IS) claims 1, 2, 4, 5, 6, 11 – 26

3. Claims 1, 2, 4, 5, 6, 11 – 26 do not involve an inventive step in light of piror art document s D1 and D2 as described in novelty objection 1 and 2 above.

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Box No. VI Certain documents cited

1. Certain published documents (Rules 43*bis*.1 and 70.10)

Application No. Patent No.	Publication date *(day/month/year)*	Filing date *(day/month/year)*	Priority date (valid claim) *(day/month/year)*
WO 2004/034310 A2	22 April 2004	7 October 2003	8 October 2002
US 2003/227934 A1	11 December 2003	10 June 2003	11 June 2002

WO 2004/034310 discloses all of the features defined in claims 27 – 30.

US 2003/227934 discloses all of the features defined in claims 1 – 8, 11 – 14, 17 – 22 and 22 – 26.

2. Non-written disclosures (Rules 43*bis*.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure *(day/month/year)*	Date of written disclosure referring to non-written disclosure *(day/month/year)*